Introduction

Foreword
Manual Conventions
NASA TechTracS Resources
4th Dimension (4D)
NASA TechTracS Tables
Keyboard Shortcuts
Tutorial

Foreword

NASA TechTracS was created using 4th Dimension in September 1992 with 24 tables and approximately 400 data fields. As of the writing of this manual in June 1999 (version FY99.02.00), there are 129 tables and approximately 2,000 data fields. While the number of tables and fields have grown by 500%, a consistent interface has remained making the navigation around NASA TechTracS user friendly.

The super user training manual should enable the beginner user to get comfortable using NASA TechTracS and at the same time should expand the knowledge of all levels of NASA TechTracS users.

Manual Conventions

The following conventions are used throughout the Super User Training Manual for easier readability:

Table Reference - a table reference is denoted by brackets before and after the table name
Example: [Technology]

Field Reference - a field reference is denoted by a table reference followed by the field name and the word field.
Example: [Technology]Case Number field

Values - quotes are used to denote values
Example: "LAR-11001-1" for [Technology]Case Number field

Menu - Bold => With arrows => denoting the different => Levels
Example: From the **File** menu, select **File => Page Setup...**

Button -italics is used to denote buttons
Example: click the *Cancel* button...

Methods - methods are denoted by Bold text
Example: **TechOrgCodes**

Variable - variables are denoted by Bold Italic text.
Example: ***vTTName*** (which stands for the Tech Transfer Officer Name - ie "Jim Aliberti")

NOTE: NASA TechTracS Expressions includes both methods and variables.

NASA TechTracS Resources

A number of useful NASA TechTracS websites are available on the web including:

NASA TechTracS Support.....http://nasatechtracs.support.knowledgesharing.com
NASA TechTracS Management.....http://nasatechtracs.management.knowledgesharing.com
NASA eNTRe.....http://nasaentre.knowledgesharing.com
NASA TechTracS TechFinder.....http://technology.larc.nasa.gov
NASA TechTracS CMT.....http://transit.larc.nasa.gov
NASA TechTracS Bug Reporting.....(link from NASA TechTracS Support site)
NASA TechTracS HQ Web Site.....http://webawntts.larc.nasa.gov
NASA TechTracS Patent Statistics... http://webawntts.larc.nasa.gov/scripts/nls_ax.dll/twPatent

NOTE: Most websites require a username and password. Please call technical support for the appropriate password. Technical support can be reached at 919-790-9895 x2.

4th Dimension (4D)

4th Dimension is a relational database as opposed to a flat file database (i.e. excel). This allows the information to be stored more efficiently (less storage space), easier data entry (data does not have to be entered more than once), and provides a powerful way of analyzing the data (i.e. Relate function that will be described later).

4th Dimension also uses client server technology to act as a data server which is used in other products such as Oracle and Sybase. Client server technology increases the performance of data server (i.e. 4D Server) over file sharing technology (i.e. FilemakerPro). 4D is also an object server which allows the developers of 4D applications to easily create/modify applications. In other words, 4D Server serves the objects used to create the graphical user interface and maintains all the objects in a single software code base.

The client is the software application that is installed on every users computer that is a user of NASA TechTracS. You will need a copy of 4th Dimension client to complete the Super User Training.

NOTE: For more information on 4th Dimension, please visit http://www.acius.com.

Mac Client

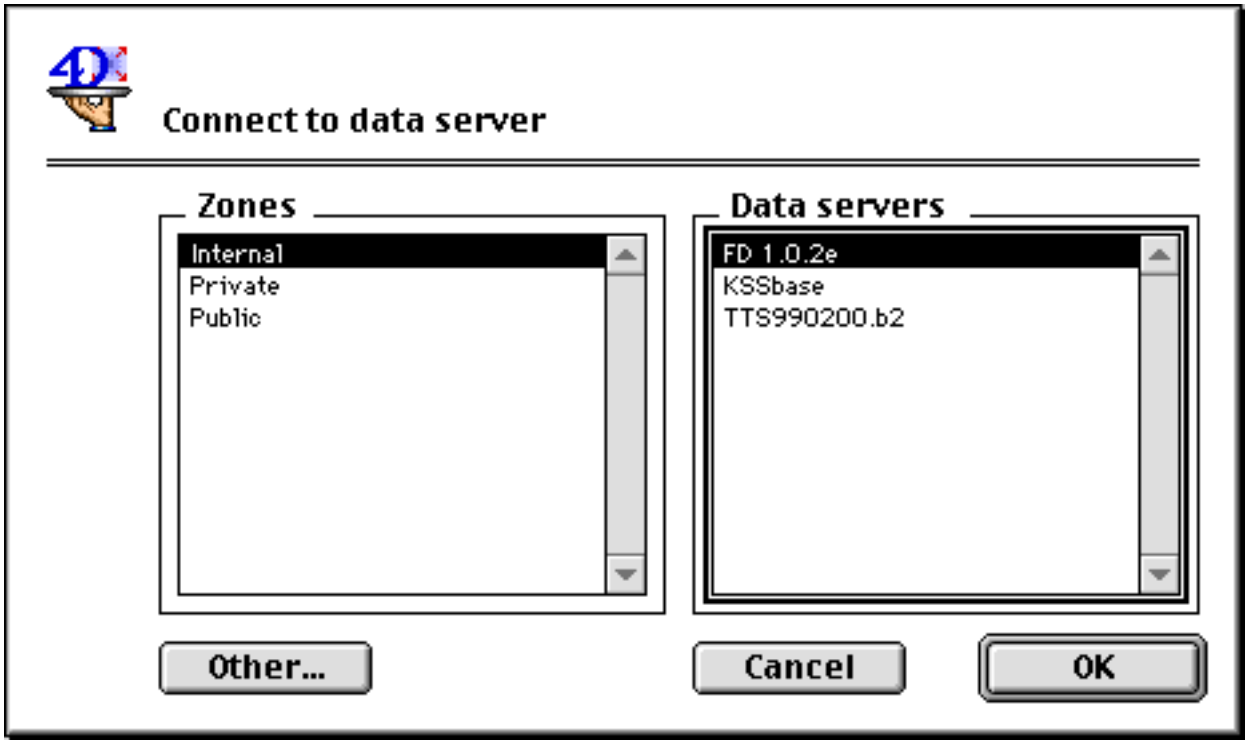
The Mac client for 4D is installed as directed by the user installing the application. To start the client, simply double-click on it.

Mac Client

After starting the 4D Client, one of two possible Connect to Data Server dialog appears.

The first possible dialog uses Open Tpt ADSP PPC (Open Transport Apple Data Stream Protocol Power PC) network component to display the available 4D Servers. The apple zones appear on the left and the 4D Data servers available in selected zone appear on the right.

Client Installation Window

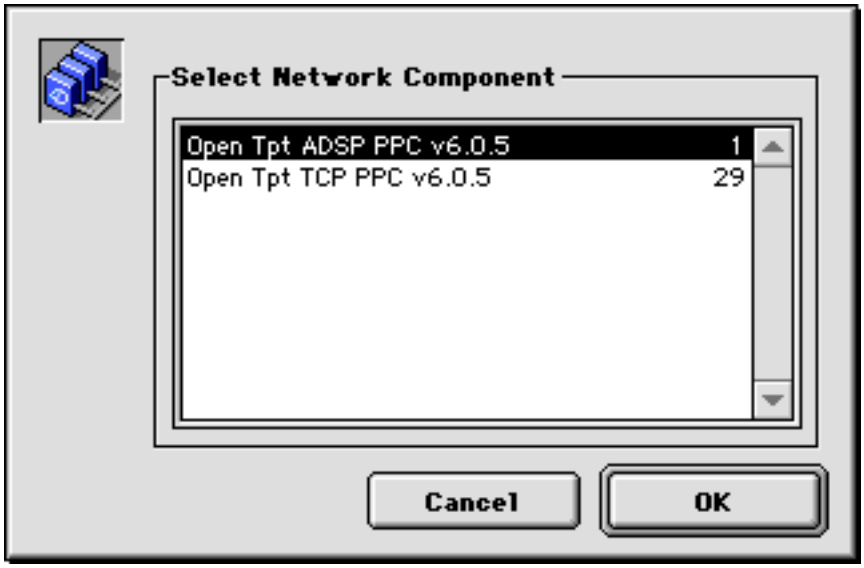


NOTE: This is the default dialog on a new 4D Client installation.

In order to connect to the any server, double-click on the server name or click on the name and click on the *OK* button.

If the 4D server is not available in any zone, then the user will need to use the Open Tpt TCP PPC (Open Transport TCP/ Power PC) network component to connect to NASA TechTracS. To switch to Open Tpt TCP PPC, click on the *Other...* button.

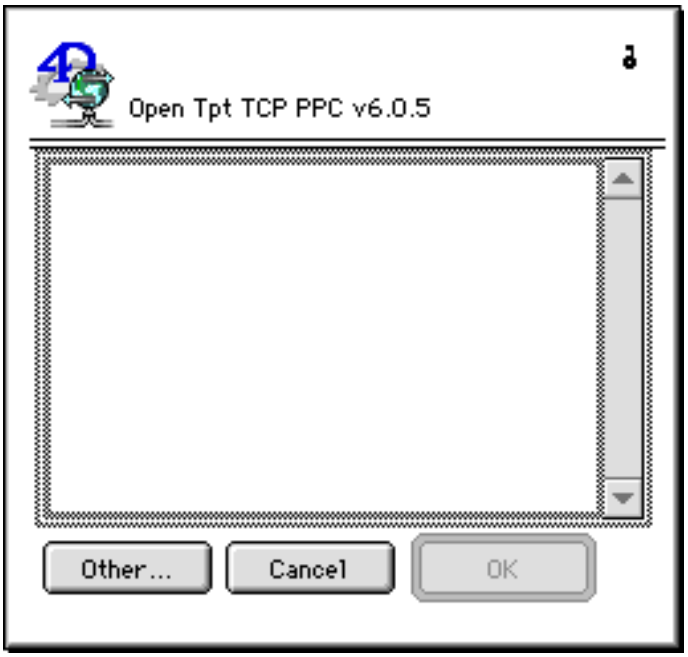
Select Network Component Dialog



NOTE: If the NASA TechTracS server is a Windows machine, you will need to connect to NASA TechTracS using the Open Tpt TCP PPC network component.

After selecting the Open Tpt TCP PPC network component, the second possible connect to 4D server dialog is displayed.

Open Tpt TCP PPC Dialog



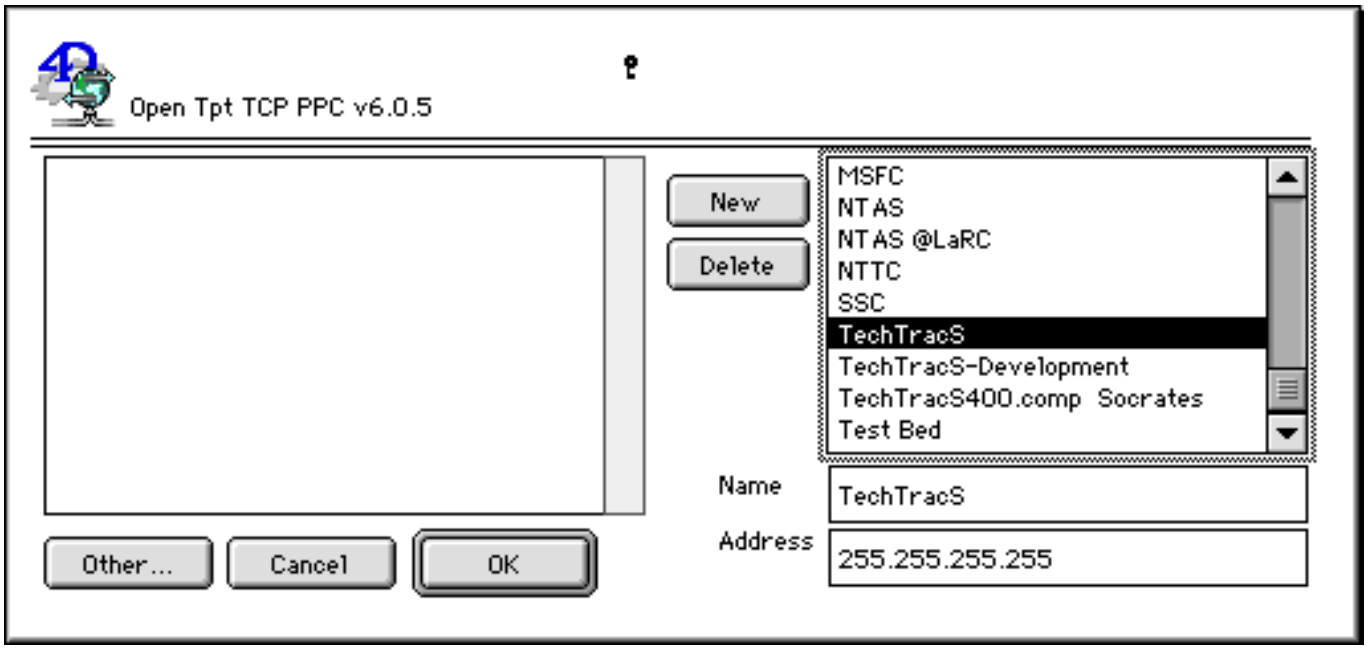
In order to connect to the any server, double-click on the server name or click on the name and click on the *OK* button.

If the NASA TechTracS server is not showing, then the user must click on the key icon located in the upper right hand corner of the dialog and register the NASA TechTracS location.

Key Icon

After clicking on the Key icon, the Open Tpt TCP PPC dialog is expanded to allow the user to create a new 4D Server entry. To create a new entry, type the name of the server in the Name box and enter the Address (IP Address). Then click the *New* button to add the entry into the choice box

Expanded Open Tpt TCP PPC Dialog

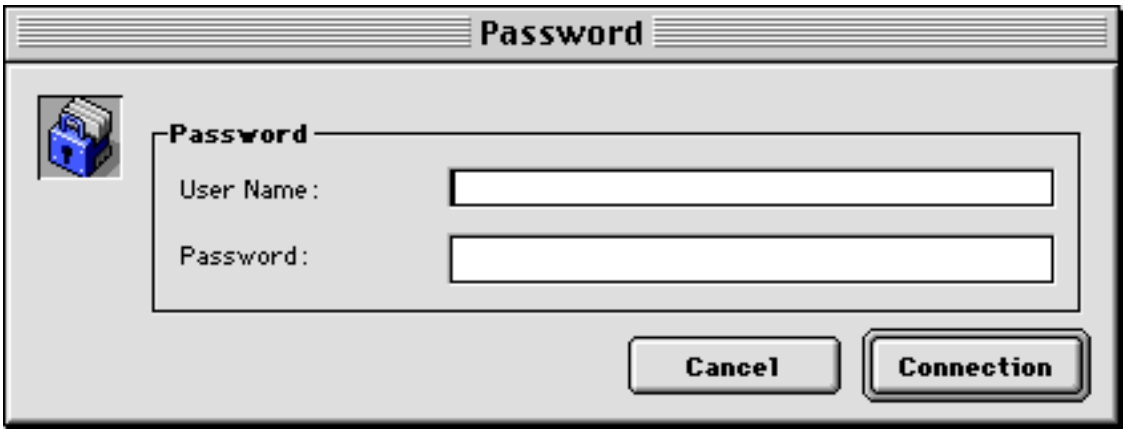


NOTE: The Connect to 4D server dialog will open to the last network component used.

In order to connect to the any server, double-click on the server name or click on the name and click on the *OK* button.

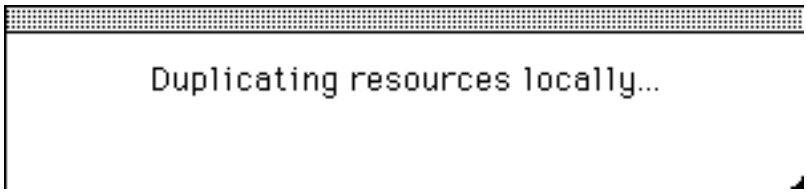
After attempting to connect to the server, the Password dialog appears. Enter your user name, password and click the *Connection* button. The User Name is not case sensitive but the Password is case sensitive. The password dialog will remain on screen until both a valid User Name or Password are entered.

Password Dialog



After the *Connection* button is clicked, the duplicating resources locally dialog is displayed indicating that your resources are being duplicated.

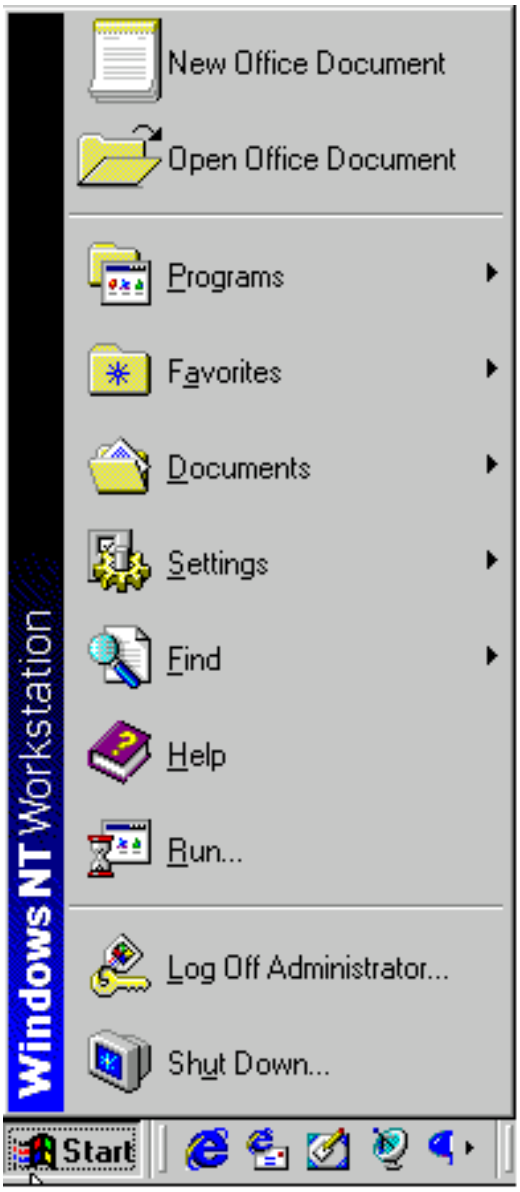
Duplicating Resources Locally Dialog



Windows Client

The windows client for 4D is usually stored in the ACI folder (i.e. C:\ACI\Programs\4DCLI605). When the client is installed, the ACI folder is accessible from the Windows Start button.

Windows Start Button

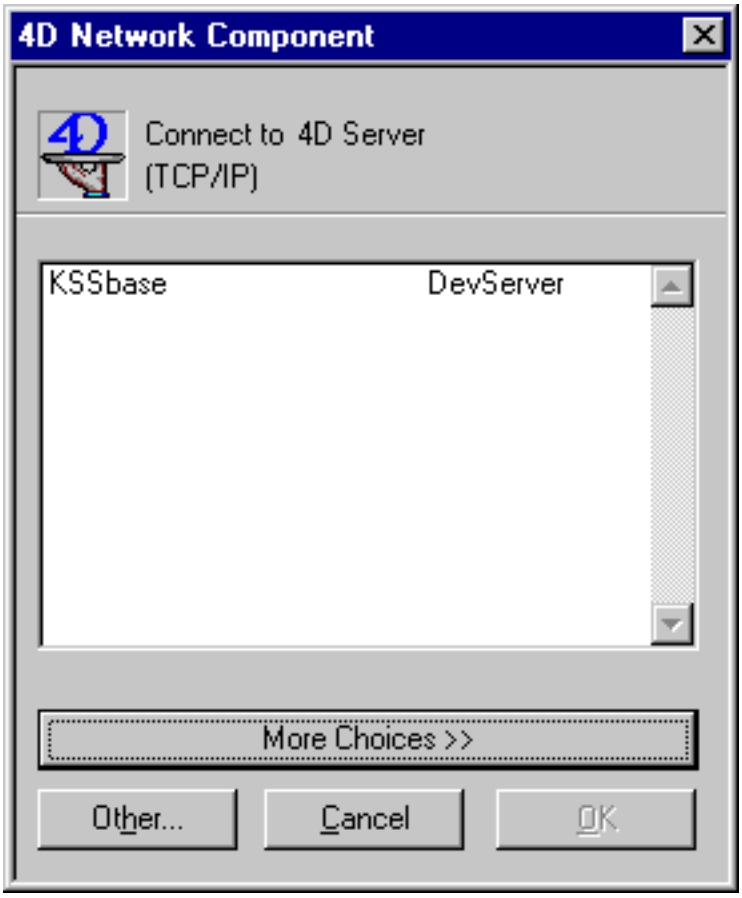


To start the windows client, navigate to Program/ACI/4D Client 6.05/4D Client 6.05 using the Start button or simply double-click on the 4DClient.exe icon.

Windows Client

After starting the 4D Client, the Connect to 4D Server dialog is displayed.

Connect to 4D Server Dialog

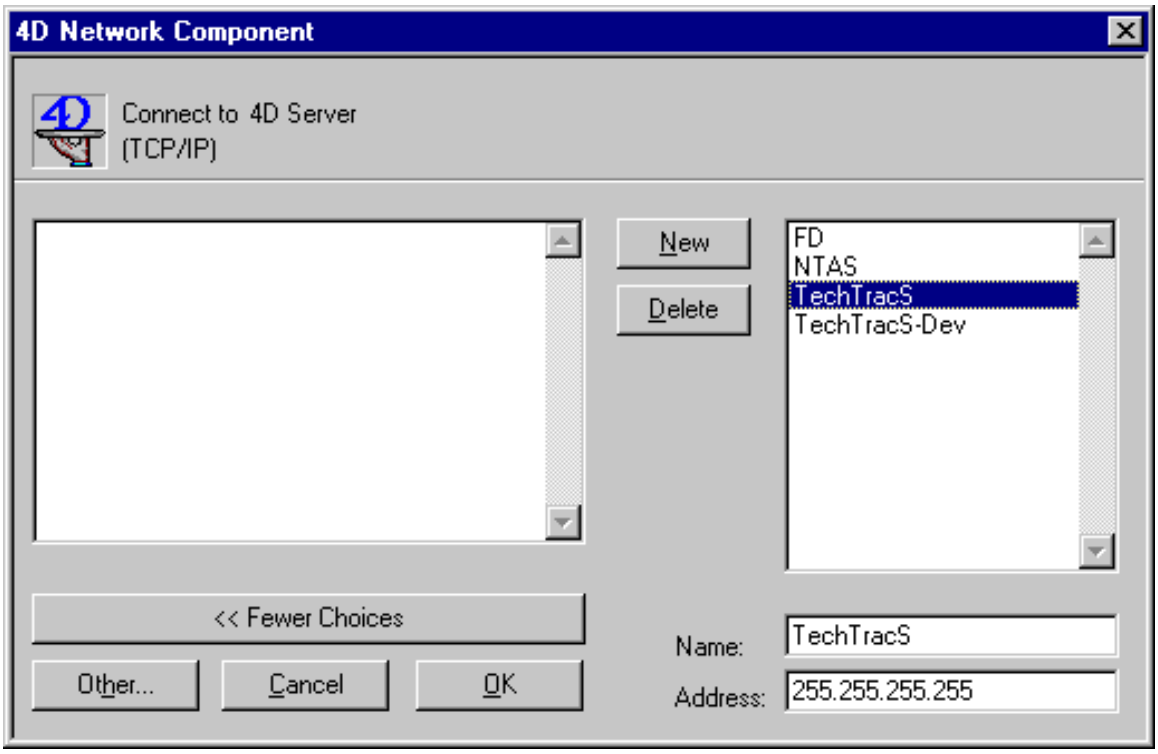


In order to connect to the any server, double-click on the server name or click on the name and click on the *OK* button.

If the NASA TechTracS server is not showing, then the user must click on the *More Choices* >> button.

After clicking on the *More Choices* >>, the Connect to 4D Server dialog is expanded to allow the user to create a new 4D Server entry. To create a new entry, type the name of the server in the Name box and enter the Address (IP Address). Then click the *New* button to add the entry into the choice box.

Expanded Open Tpt TCP PPC Dialog

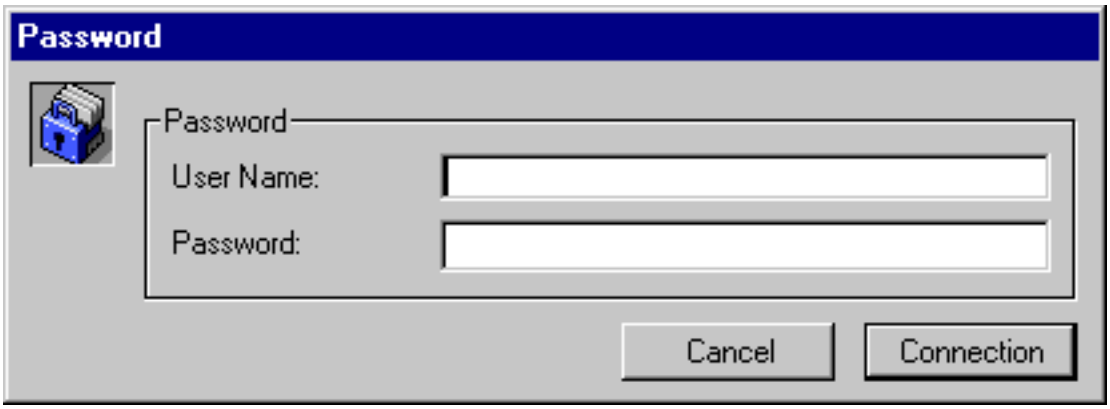


NOTE: While ACI does support other communications protocols, NASA TechTracS only uses the TCP/IP network Component on the PC for stability.

In order to connect to the any server, double-click on the server name or click on the name and click on the *OK* button.

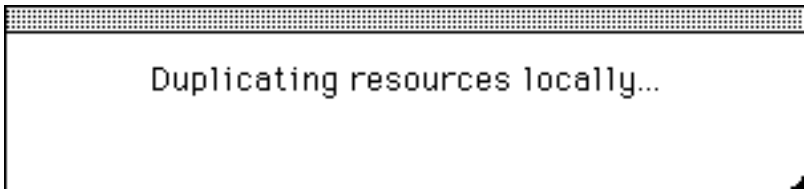
After attempting to connect to the server, the Password dialog appears. Enter your user name, password and click the *Connection* button. The User Name is not case sensitive but the Password is case sensitive. The password dialog will remain on screen until both a valid User Name or Password are entered.

Password Dialog



After the *Connection* button is clicked, the duplicating resources locally dialog is displayed indicating that your resources are being duplicated.

Duplicating Resources Locally Dialog

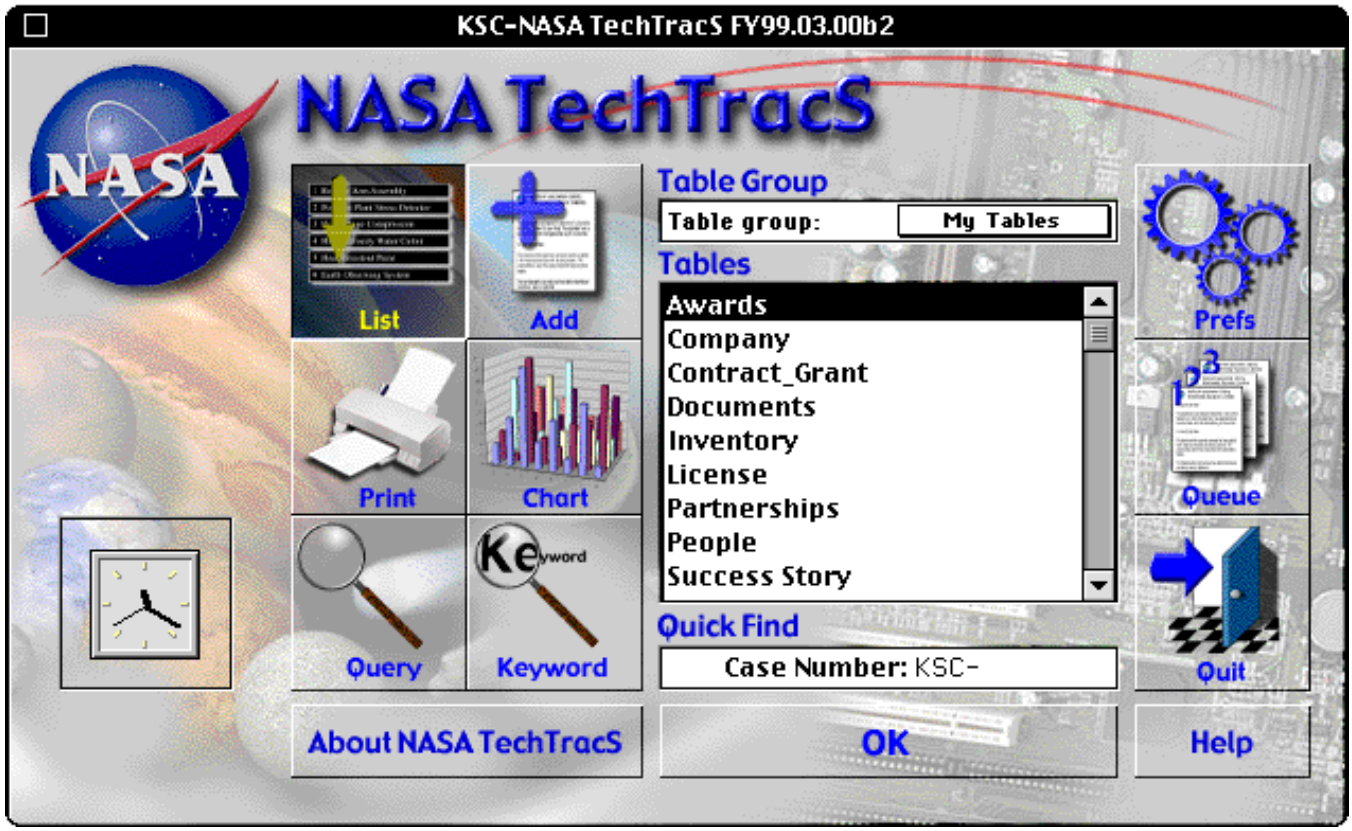


The first window to appear as the user signs into NASA TechTracS is the MagentaKit which welcomes the user and indicates that NASA TechTracS is loading.

MagentaKit

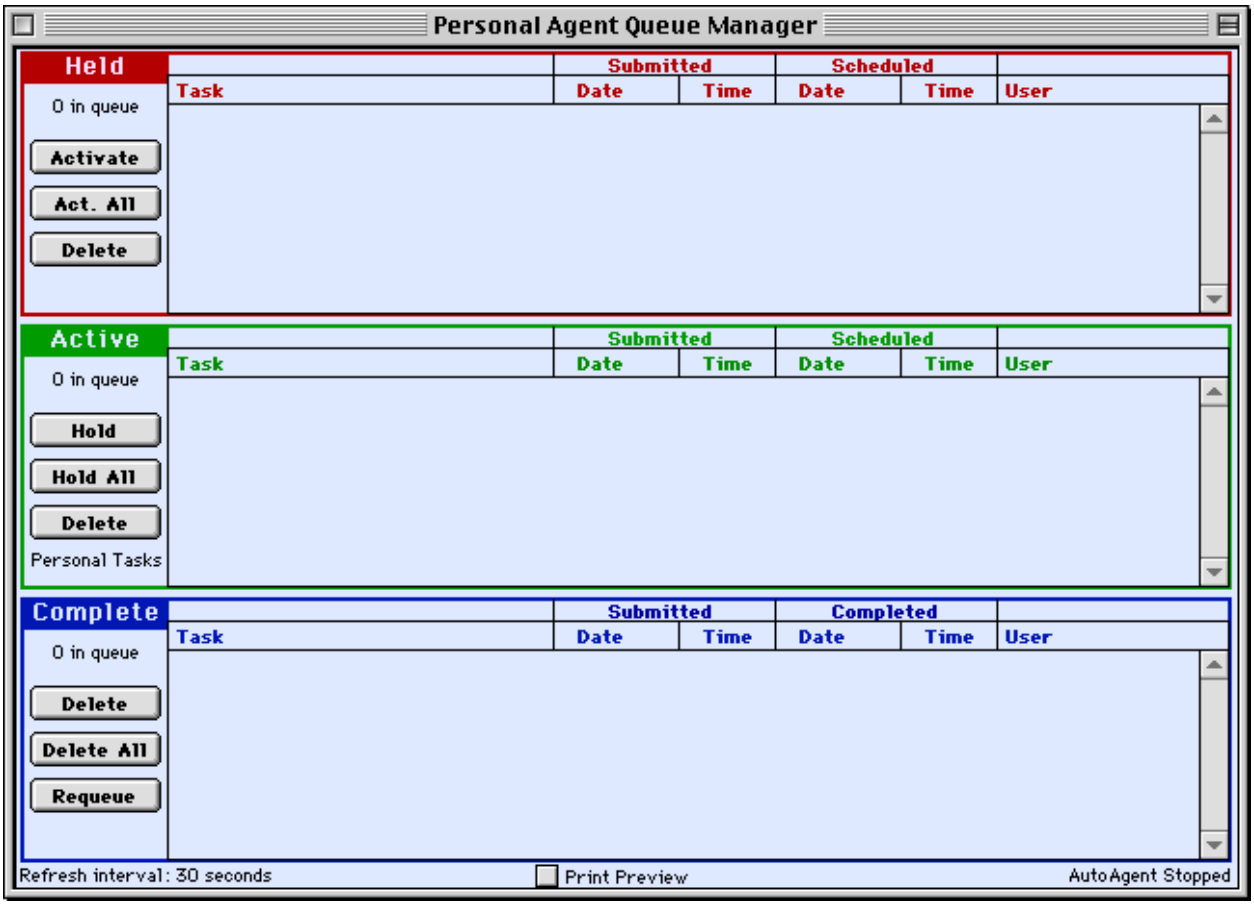
After loading, the Data Control Panel displays.

Data Control Panel



If the Personal AutoAgent preference is checked, the Personal AutoAgent Queue Manager window is displayed behind the Data Control Panel.

Personal AutoAgent Queue Manager



NASA TechTracS Tables

NASA TechTracS contains 129 tables and approximately 2,000 data fields. Each table has an assigned number. The relevance of the assigned number will be discussed later in the manual.

Some of the NASA TechTracS tables are able to WAN (transmit data to Agencywide TechTracS). Whenever, a record from a WANable (WAN to HQ equals Yes) table is added, modified or deleted, a WAN record is created so that the data can be transmitted to Agencywide TechTracS.

Number	Table Name	WAN to HQ
8	Action Item	
38	Assignment	Yes
127	Award Process	Yes
24	Awards	Yes
129	Awards by Innovator	Yes
128	Awards Chronology	
65	BLI	
68	Budget	Yes
18	CG Chronology	
66	COG	
12	Company	Yes
32	Company Chrono	
39	Confirm_License	Yes
116	Congress	
47	Congressional Districts	
7	Constants	
26	Contract Reports	Yes
40	Contract Stats	
9	Contract_Grant	Yes
69	Deliverables	Yes
14	Documents	
25	Enclosures	
102	External_Application_Usage	
50	Foreign Filing	
70	FY Budget Cost	Yes
13	Inquiry	Yes
61	Inventory	Yes
89	KeyCompany	Yes
87	KeyContract	Yes
123	KeyPartnership	Yes
88	KeyPeople	Yes
91	KeySuccess	Yes
90	KeyTechnology	Yes

Number	Table Name	WAN to HQ
112	KeyTOPS	Yes
104	Lead Chronology	Yes
51	LeRC Eval	
27	License	Yes
30	License Chronology	
108	License Milestones	
109	License Milestones Chronology	
106	License Reports	Yes
107	License Reports Content	Yes
79	License Royalties	Yes
29	License Royalty Distribution	Yes
110	License Royalty Recipients	
28	License Technologies	Yes
20	List	
35	Maintenance Fee	
21	Multimedia	Yes
80	NASA Leads	Yes
105	NASA Tech Leads	Yes
34	Other Contracts	Yes
49	Outside Patent Preparation	
64	Partners	Yes
67	Partners FY	Yes
74	Partnership Assistance	Yes
86	Partnership Chronology	
103	Partnership NTIS	Yes
124	Partnership NTRs	Yes
126	Partnership Org Codes	
122	Partnership SIC	Yes
78	Partnership UPN_FPN	Yes
125	Partnership UPN_FPN FY	Yes
63	Partnerships	Yes
36	PAT Statistics	Yes
76	PAT Stats Month	Yes
11	People	Yes
23	People Chrono	
31	Possible Disclosure	
16	Process	
72	Products_Services	
62	Program Code	
71	Program Office	
42	PTO Actions	Yes

19	Publication	Yes
55	SBIR_STTR Funding Request	
54	SBIR_STTR Technical Report	
117	Shadow	
Number	**Table Name**	**WAN to HQ**
85	sparexxx	Yes
2	Structure	
52	Subcontracts	
22	Success Story	Yes
100	Success Story Assist	Yes
101	Success Story Assoc Docs	Yes
120	Success Story Chronology	
119	Success Story Technologies	Yes
121	Success Story UPNs	Yes
83	Tech Additional Documentation	Yes
17	Tech Chronology	
10	Tech Innovator	Yes
33	Tech Maint Fee	Yes
43	Tech Org Codes	Yes
77	Tech UPN	Yes
15	Technology	Yes
84	Technology Related Cases	Yes
111	TOPS	Yes
115	TOPS Category	Yes
113	TOPS Related Technologies	Yes
114	TOPS WWW References	Yes
4	User	
44	Waiver	Yes
81	Web Statistics	
118	xAudit	
93	xDisciplines	Yes
37	xHTML	
96	xInvNTIS	Yes
97	xInvSIC	Yes
3	xKeywords	
56	xNTIS Category	
57	xNTIS Subs	
53	xOrg Codes	
92	xPeopleType	Yes
5	xPrinter	
6	xSEQ	
59	xSICIndustry	

58	xSICMajorGroups	
60	xSICSubIndustry	
75	xSpare	
98	xSSNTIS	Yes
99	xSSSIC	Yes
94	xTechNTIS	Yes
Number	**Table Name**	**WAN to HQ**
95	xTechSIC	Yes
41	xText Codes	
48	xTickReminders	
46	xTickRules	
1	xToolkit	
45	xWAN Post	
73	xWAN Web	
82	xWebData	

Keyboard Shortcuts

Keyboard shortcuts are meant to be a quick and easy way to perform an operation that would otherwise require the user to move the mouse and select or click on an area of NASA TechTracS. Keyboard shortcuts can be classified into the following categories:

Navigational Shortcuts
Menu Bar Shortcuts

Navigational Shortcuts

From the Data Control Panel, the following navigational shortcuts are available:

Shortcut	Macintosh	PC
New Data Window	"Opt + click *OK*"	"Alt + click *OK*"

From the List Window, the following navigational shortcuts are available:

Shortcut	Macintosh	PC
Next Table	"Cmd + up arrow"	"Ctrl + up arrow"
Previous Table	"Cmd + down arrow"	"Ctrl + down arrow"
Data Control Panel	"Cmd + ."	"Ctrl + ."
New Data Window	"Opt + choose table"	"Alt + choose table"

From the Input Window, the following navigational shortcuts are available

Shortcut	Macintosh	PC
Next Page	"Cmd + up arrow"	"Ctrl + up arrow"
Previous Page	"Cmd + down"	"Ctrl + down arrow"
Next Record	"Cmd + right arrow"	"Ctrl + right arrow"
Previous Record	"Cmd + left arrow"	"Ctrl + left arrow"
Cancel Record	"Cmd + ."	"Ctrl + ."

Menu Bar Shortcuts

Shortcut	Macintosh	PC
File => Print	"Cmd + P"	"Ctrl + P"
File => Quit	"Cmd + Q"	"Ctrl + Q"
Edit => Undo	"Cmd + Z"	"Ctrl + Z"
Edit => Cut	"Cmd + X"	"Ctrl + X"
Edit => Copy	"Cmd + C'	"Ctrl + C"
Edit => Paste	"Cmd + V"	"Ctrl + V"
Edit => Select All	"Cmd + A"	"Ctrl + A"
Enter => New	"Cmd + N"	"Ctrl + N"
Enter => Modify	"Cmd + M"	"Ctrl + M"
Enter => Delete	"Cmd + D"	"Ctrl + D"
Select => Show All	"Cmd + G"	"Ctrl + G"
Select => Show Subset	"Cmd + H"	"Ctrl + H"
Select => Find	"Cmd + F"	"Ctrl + F"
Select => Quick Query	"Cmd + S"	"Ctrl + S"
Select => Query Editor	"Cmd + E"	"Ctrl + E"
Select => Query by Index	"Cmd + I"	"Ctrl + I"
Select => Order Selection	"Cmd + T"	"Ctrl + T"
Report => Quick Report	"Cmd + R"	"Ctrl + R"
Report => Labels	"Cmd + J"	"Ctrl + J"

Tutorial

Tutorial # 1 - Sign into NASA TechTracS (2 Minutes)

1. Sign into NASA TechTracS using 4D Client.

2. After signing in, close the Personal Agent window.